ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

DATE: November 3, 1976

TO: Miles A. Zamco, Field Operations Manager, DAPC

FROM: William Zenisek, Field Operations Engineer, DAPC

SUBJECT: Air Pollution Investigation of October 29, 1976
American Cyanamid Company
1306 McKinley Avenue
Joliet, Illinois ID# 197 809 AAR

Company Contact: Mr. E.P. Stewart, Plant Manager
Mr. John Blackburn, Production Supt.
Telephone: (815) 722-6671

Permit Status:

		Date Granted	Expires
Ø 3090141	Liquid Alum Unit	02-01-74	01-11-79
Ø 3090142	Dry Alum	01-23-74	01-11-79
Ø 3090143	Sulfuric Acid Plant	02-26-75	

An investigation was made to determine current status of plant operations with respect to air pollution emissions. A notice of a complaint from Senator Mitchler's office was related to noise pollution. Mr. John Blackburn provided inspection of the facility.

The sulfuric acid plant and the liquid alum plant were not in operation, due to a power failure. The sulfuric acid plant was still hot and was expected to be started by noon. The plant operations were unchanged since last years inspection.

The sulfur dioxide emissions from the sulfuric acid plant were monitored on a strip chart. The operators attempted to run the plant so that the sulfur dioxide emissions did not exceed 2000 ppm. On reviewing the strip chart for the past week, it was noted that there were periods of time when the levels of SO2 exceeded 2000 ppm and there were about equal periods of time when the levels were below 2000 ppm. It was estimated that the average levels were about 2000 ppm. Mr. Blackburn explained that the levels above 2000 ppm were the result of minor plant malfunctions. Blackburn also said that they were training new operators for the sulfuric acid plant.

The dry alum plant was in normal operation. A baghouse dust collector was in service to control dust emissions. There were no visible dust emissions and the emissions from the plant were considered to be in compliance.

In summary, the SO_2 emissions were considered to be mariginal with respect to compliance. The SO_2 emissions could be maintained at or below 2000 ppm by better control of temperatures and other variable parameters by the plant operators. There were no problems with particulate emissions.

WZ:lq

cc: Region II File

Air Pollution Emissions

American Cyanamid Company
Joliet, Illinois

		Annual Emissions Tons Per Year				
		Particulates	So_2	CO	HC	No_x
1.	Fuel Useage 20×10^6 Cu. Ft./year Natural Gas	0.2	-	0.2	-	1.2
2.	Sulfuric Acid Plant operation time: 24 hr/day, 7 day/wk., 50 wk/yr or 8400 hr/yr. P.W.R. (tons acid production): 150 ton acid/day or 6.25 ton acid/hr. Tested emissions (12-23-74) acid mist - .818 lbs/hr. So_2 - 226.9 lbs/hr.	3.4	961.5	-	-	-
3.	Liquid Alum Plant Digestor Stack	4.6				
4.	Dry Alum Plant P.W.R 1.39 ton/hr. Operation Time: 24 hr/day, 7 day/wk, 50 wk/yr. (8400 hr/yr)	0.3	-	-	-	-
	Total emissions	8.3 Particulate	961.5 So_2	0.2 Co	- HC	1.2 No_x

WZ:dd